

LPDES PERMIT NO. LA0002950, AI No. 2049

LPDES FACT SHEET and RATIONALE
FOR THE DRAFT LOUISIANA POLLUTANT DISCHARGE ELIMINATION SYSTEM
(LPDES) PERMIT TO DISCHARGE TO WATERS OF LOUISIANA

- I. Company/Facility Name:** BASF Corporation
Louisiana Production Site
P.O. Box 457
Geismar, LA 70734
- II. Issuing Office:** Louisiana Department of Environmental Quality (LDEQ)
Office of Environmental Services
Post Office Box 4313
Baton Rouge, Louisiana 70821-4313
- III. Prepared By:** Jenniffer Sheppard
Level 1 Industrial Permits Section
Permits Division
Phone #: 225-219-3138
E-mail: jenniffer.sheppard@la.gov
- Date Prepared:** December 5, 2006

IV. Permit Action/Status:**A. Reason For Permit Action:**

Proposed revocation and reissuance of an existing Louisiana Pollutant Discharge Elimination System (LPDES) permit for a 5-year term following regulations promulgated at LAC 33:IX.2711/40 CFR 122.46*.

- * In order to ease the transition from NPDES to LPDES permits, dual regulatory references are provided where applicable. The LAC references are the legal references while the 40 CFR references are presented for informational purposes only. In most cases, LAC language is based on and is identical to the 40 CFR language. 40 CFR Parts 401, and 405-471 have been adopted by reference at LAC 33:IX.4903 and will not have dual references. In addition, state standards (LAC Chapter 11) will not have dual references.

LAC 33:IX Citations: Unless otherwise stated, citations to LAC 33:IX refer to promulgated regulations listed at Louisiana Administrative Code, Title 33, Part IX.

40 CFR Citations: Unless otherwise stated, citations to 40 CFR refer to promulgated regulations listed at Title 40, Code of Federal Regulations in accordance with the dates specified at LAC 33:IX.4901, 4903, and 2301.F.

- B. NPDES permit - NPDES permit effective date:** N/A
NPDES permit expiration date: N/A
EPA has not retained enforcement authority.
- C. LPDES permit - LPDES permit effective date:** February 1, 2004
LPDES permit expiration date: January 31, 2009
- D. Application received on November 20, 2006**

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V. Facility Information:

A. Location - 8404 Highway 75 in Geismar

B. Applicant Activity -

According to the application, BASF Corporation, Louisiana Production Site, is a large diversified chemical manufacturing facility with a number of individual plants producing a wide variety of product intermediates which include acetylene, aniline, Ethylene Oxide (EO), Ethylene Glycol (EG), Toluene Diisocyanate (TDI), 1,4-Butanediol (BD), Methylene Bis-Phenylisocyanate (MDI), Hydrochloric Acid (HCL), Polyether, Polyols, Diols, Aniline, Amines, Acetylene, Tetrahydrofuran (THF), Polytetrahydrofuran, Butyrolactone, N-Methyl Pyrrolidone (NMP), Morpholine, Glyoxal, Surfactants, Tertiary Butyl Amines (TBA), and Methoxyisopropyl amine (MOIPA). The facility includes utilities such as the River Water Clarifier, Demineralization (DEMIN) facility, and the Cogeneration (COGEN) Plant.

Air Liquide has a facility to separate oxygen, nitrogen, and argon from air feedstocks at BASF Corporation's Louisiana Production site. A dinitrotoluene (DNT) manufacturing plant is also located on BASF property.

In addition, BASF has several expansions and improvements underway. As a result of these expansions and improvements, BASF has requested a revoke and reissuance of their existing LPDES permit.

C. Technology Basis - (40 CFR Chapter 1, Subchapter N/Parts 401-402, and 404-471 have been adopted by reference at LAC 33:IX.4903)

Guideline

Organic Chemicals, Plastics,
 and Synthetic Fibers
 Process Flow - 5.507 MGD

Reference

40 CFR 414
 Subparts F, G, H, and I

Other sources of technology based limits:

LDEQ Stormwater Guidance, letter dated 6/17/87, from J. Dale Givens (LDEQ) to Myron Knudson (EPA Region 6).
 Louisiana Water Quality Management Plan for Sanitary Dischargers.
 Best Professional Judgement

D. Fee Rate -
 1. Fee Rating Facility Type: major
 2. Complexity Type: VI
 3. Wastewater Type: II
 4. SIC code: 2869, 2865, and 2819

E. Continuous Facility Effluent Flow - 18.0 MGD.

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VI. Receiving Waters: Mississippi River (Outfalls 001 and 002), New River via Smith Bayou (Outfall 003)

New River (Outfall 003)

1. River Basin: Lake Pontchartrain, Subsegment 040404
2. Designated Uses:
 primary contact recreation, secondary contact recreation, and fish and wildlife propagation.

Mississippi River (Outfalls 001 and 002)

1. TSS (15%), mg/L: 32
2. Average Hardness, mg/L CaCO₃: 153.4
3. Critical Flow, cfs: 141955
4. Mixing Zone Fraction: 1/3
5. Harmonic Mean Flow, cfs: 366748
6. River Basin: Mississippi River, Segment No. 070301
7. Designated Uses:
 primary contact recreation, secondary contact recreation, and fish and wildlife propagation, and drinking water supply.

Information based on the following: Water Quality Management Plan, Volume 5A, 1994; LAC 33:IX Chapter 11;/Recommendation(s) from the Engineering Section. Hardness and 15% TSS data come from an e-mail from Brian Baker (LDEQ Engineering Section) to Jennifer Sheppard (LDEQ Permit), dated December 1, 2006.

VII. Outfall Information:

Outfall 001

- A. Type of wastewater - the discharge from the plant stormwater drainage system to the Mississippi River. The plant stormwater drainage system receives treated discharge from Internal Outfall 101 and optional treated discharge from Outfall 401; non-contact cooling water and cooling tower and boiler blowdown; treated sanitary wastewater from the administration building; wastewaters from the Aniline Plant Neutralization System, the HCL Neutralization Facility, Utilities Neutralization System, the Chlorine-Caustic Unloading (CCU) Plant, DEMIN sumps, multimedia filter, and COGEN Plant; acid scrubber blowdown; Marine Shipping Tank Farm low contamination potential stormwater and wash down water; steam condensate from steam traps, IMTT dock area secondary containment effluent; IMTT low contamination potential stormwater; BASF DNT Plant low contamination potential stormwater; Air Liquide low contamination potential stormwater and wash down water; sand filter backwash; low contamination potential stormwater runoff and wash down water; and hydrostatic test waters.
- B. Location - at the point of discharge of the plant moat system lift station weir prior to commingling with any other waters, at Latitude 30°11'04", Longitude 91°00'40".
- C. Treatment - treatment of process wastewaters consists of:
 - neutralization
 - oil removal

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- D. Flow - Continuous Flow 18.0 MGD.
- E. Receiving waters - Mississippi River
- F. Basin and segment - Mississippi River Basin, Segment 070301

Internal Outfall 101

- A. Type of wastewater - the discharge from the Wastewater Treatment Plant (WWTP) and the optional discharge from the TDI Plant carbon treatment unit to Final Outfall 001 via the plant moat system. The WWTP receives discharges from Internal Outfall 201 and 301; process wastewaters from the Polyols Plant, TDI Plant, MDI Plant, Amines Plant, THF/PTHF Plant, EO/EG Plant, Glyoxal Plant, PYR/NVP/PVP Plant, Acetylene Plant, APCI SSU Plant, BASF DNT Plant, Surfactants Plant, Basic Chemicals EDC Plant, and IMTT Facility; filtrate and wash down water from the sludge belt press; sanitary wastewater; wastewater from groundwater recovery projects; acid addition; all stormwater collected in the WWTP; WWTP water usage, which includes vapor scrubber and plant seal wastewater, etc.; hydrostatic test waters; maintenance activity wastewaters; line pacification rinse water; and high contamination potential (i.e., the first flush, defined as 1.0 inch per 24-hour period) process area stormwater runoff. In addition, the WWTP may receive optional discharges from Internal Outfall 401; the Aniline Plant Neutralization System; the HCL Neutralization Facility; the CCU Plant; and IMTT dock area secondary containment
- B. Location - at the point of the combined discharge of the WWTP (downstream of the final carbon treatment unit when operating) and the optional TDI Plant carbon treatment unit prior to entering the plant moat system and prior to commingling with any other waters and at Internal Outfall 401, at Latitude 30°11'27", Longitude 91°00'10".
- C. Treatment - treatment of process wastewaters consists of:
 - solids removal
 - sparging
 - equalization
 - neutralization
 - aerobic biological treatment
 - settling/clarification
 - sand filtration
 - sludge dewatering
 - carbon filtration (as needed)

DNT wastewater

 - activated carbon absorption

Acetylene wastewater

 - clarifier (soot water only)
 - inlet surge/sparge tank
- D. Flow - Continuous Flow 5.579 MGD.

Process Wastewater*	5.507 MGD
Sanitary Wastewater*	0.072 MGD

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* Specific component waste streams are defined at Appendix A-1.

- E. Receiving waters - Mississippi River via Final Outfall 001.
- F. Basin and segment - Mississippi River Basin, Segment 070301

Internal Outfall 201

- A. Type of wastewater - the discharge from the Diols Plants: effluent from the metals precipitation treatment unit, the distillation unit wastewater, and the GBL/NMP unit wastewater to the WWTP. The metals precipitation treatment unit receives process wastewater and high contamination potential (i.e., the first flush, defined as 1.0 inch per 24-hour period) stormwater runoff from the process area sumps.
- B. Location - at the point of the combined discharge of the Diols Plant metals precipitation treatment unit effluent and the distillation unit wastewater prior to commingling with any other waters, at Latitude 30°11'56", Longitude 90°00'08".
- C. Treatment - treatment of process wastewaters consists of:
 - chemical precipitation for metals
 - flocculation
 - reverse osmosis (recycle only)
- D. Flow - Intermittent, Estimated Flow is 0.474 MGD.
- E. Receiving waters - Mississippi River via Final Outfall 001
- F. Basin and segment - Mississippi River Basin, Segment 070301

Internal Outfall 301

- A. Type of wastewater - the intermittent internal discharge from the TDA unit metals treatment unit and the TDI Plant distillation unit (T120), on an as needed basis to the WWTP. The TDI distillation unit wastewater may be optionally diverted from the WWTP, routed to carbon treatments, combined with WWTP effluent, and discharged through Internal Outfall 101; or optionally be diverted from the WWTP, routed to carbon treatment, and discharged to the plant moat system (*1). (Discharge to the plant moat system will be separately and concurrently sampled during the same 24-hour period as Internal Outfall 101. The separately collected 24-hour composite samples are combined proportional to flow and analyzed as one sample.) The TDA unit metals treatment unit receives high contamination potential (i.e., the first flush, defined as 1.0 inch per 24-hour period) stormwater runoff from the TDA unit, TDA unit wash down, and wastewater generated from maintenance activities.
- B. Location - at the point of the combined discharge from the TDA metals treatment unit and T120 stream prior to commingling with any other waters when combined, at Latitude 30°11'53", Longitude 90°59'48".
- C. Treatment - treatment of process wastewaters consists of:
 - chemical precipitation for metals
 - flocculation

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- D. Flow - Intermittent , Estimated Flow is 0.011 MGD.
- E. Receiving waters - Mississippi River via Final Outfall 001
- F. Basin and segment - Mississippi River Basin, Segment 070301

Internal Outfall 401

- A. Type of wastewater - the discharge of treated process wastewaters from the Aniline Plant, incinerator scrubber blowdown, high contamination potential (i.e., the first flush, defined as 1.0 inch per 24-hour period) stormwater and untreated low contamination potential stormwater runoff from the Aniline Plant.
- B. Location - at the combined discharge point of the Aniline Plant chemical treatment facility and low contamination potential stormwater runoff discharge prior to commingling with any other waters. at Latitude 30°11'38", Longitude 91°00'09".
- C. Treatment - treatment of process wastewaters consists of:
 - steam stripping
 - ozonation
 - activated carbon Absorption
- D. Flow - Continuous Flow 0.318 MGD.
- E. Receiving waters - Mississippi River via Final Outfall 001.
- F. Basin and segment - Mississippi River Basin, Segment 070301

Outfall 002

- A. Type of wastewater - the discharge of the raw water intake treatment system clarifier underflow.
- B. Location - at the point of discharge from the raw river water intake treatment system clarifier underflow prior to entering the Mississippi River, at Latitude 30°11'14", Longitude 91°00'48".
- C. Treatment - treatment of clarifier underflow wastewaters consists of:
 - sedimentation
- D. Flow - Intermittent, Estimated Flow is 0.002 MGD.
- E. Receiving waters - Mississippi River
- F. Basin and segment - Mississippi River Basin, Segment 070301

Outfall 003

- A. Type of wastewater - the discharge of potential emergency overflow of excess capacity stormwater (commingled with other streams discharging to the plant moat system) from the stormwater retention basin.

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- B. Location -at the point of overflow from the stormwater retention basin prior to combining with any other waters, at Latitude 30°12'01", Longitude 90°58'59".
- C. Treatment - None
- D. Flow - Intermittent
- E. Receiving waters - New River via Smith Bayou
- F. Basin and segment - Lake Pontchartrain Basin, Segment 040404

VIII. Proposed Permit Limits:

The specific effluent limitations and/or conditions will be found in the draft permit. Development and calculation of permit limits are detailed in the Permit Limit Rationale section below.

Summary of Proposed Changes From the Current LPDES Permit:

- A. BASF has several expansions and improvements underway. As a result of these expansions and improvements, BASF has requested a revoke and reissuance of their existing LPDES permit.

The following expansions and improvements identified by BASF Corporation were:

Amines BDMAE Expansion - This project has a planned production increase, but will not increase wastewater flow.

Basic Chemicals Company - This project will add a new wastewater stream and increase wastewater flow.

Sodium Methylate Project - This project will increase production and wastewater flow.

Amines AEOA Project - This project will increase production and wastewater flow.

Intermediates GBL Expansion - This project has a planned production increase, but will not increase wastewater flow.

Intermediates NMP Expansion - This project will increase production and wastewater flow.

Polyols Expansion - This project will increase production and wastewater flow.

IMTT Geismar Logistics Center - International Matex Tank Terminals (IMTT) purchased property from BASF and is currently constructing a storage and transfer terminal to be owned and operated by IMTT. This project will increase wastewater flow.

Speciality Amines Project - This project will increase production and wastewater flow.

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TDI Expansion - This project will increase production and wastewater flow.

MDI-2 Cascade Project - This project will increase production and wastewater flow.

EO3 Plant Scrubber/Heat Exchanger Upgrade - This project will not increase production and will have little impact on wastewater flow.

- B. Outfall 001 - Reporting requirements for the parameters Total Phosphorus and Ammonia (as N) have been removed from the proposed permit. This requirement was previously established due to phosphorus and nitrogen impairments in the Mississippi River. The 303(d) list has since been revised and these impairments are no longer pollutants of concern, therefore, the report only requirements have been removed.
- C. Internal Outfall 101 - the process wastewater flow has increased from 4.261 MGD to 5.507 MGD due to planned expansions/improvements as listed in Section VIII.A of this Fact Sheet, therefore limitations have also increased in accordance with the requirements in OCPSPF Guidelines at 40 CFR.
- D. Internal Outfall 101 - BASF Corporation has requested a reduction in the measurement frequency for Toluene, Benzene, Total Cyanide, and Chlorobenzene. Based on compliance history in accordance with the requirements stated in the USEPA Memorandum "Interim Guidance for Performance Based Reductions of NPDES Permit Monitoring Frequencies," the measurement frequency for Toluene, Benzene, and Chlorobenzene has been changed from 1/week to 1/ 2 weeks, and the frequency for Total Cyanide has been changed from 1/month to 1/quarter.
- E. Internal Outfall 301 - BASF Corporation has requested a reduction in the measurement frequency for Total Nickel. Based on compliance history in accordance with the requirements stated in the USEPA Memorandum "Interim Guidance for Performance Based Reductions of NPDES Permit Monitoring Frequencies," the measurement frequency for Total Nickel has been changed from 1/week to 1/ 2 weeks.
- F. Internal Outfall 401 - BASF Corporation has requested a reduction in the measurement frequency for Total Copper. Based on compliance history in accordance with the requirements stated in the USEPA Memorandum "Interim Guidance for Performance Based Reductions of NPDES Permit Monitoring Frequencies," the measurement frequency for Total Copper has been changed from 2/month to 1/quarter.
- G. Internal Outfall 401 - the process wastewater flow has increased from 0.310 MGD to 0.318 MGD due to planned expansions/improvements as listed in Section VIII.A of this Fact Sheet, therefore limitations have also increased in accordance with the requirements in OCPSPF Guidelines at 40 CFR.

IX. Permit Limit Rationale:

The following section sets forth the principal facts and the significant factual, legal, methodological, and policy questions considered in preparing the draft permit. Also set forth are any calculations or other explanations of the derivation of specific effluent limitations and conditions, including a citation to the applicable effluent limitation guideline or performance standard provisions as required under

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LAC 33:IX.2707/40 CFR Part 122.44 and reasons why they are applicable or an explanation of how the alternate effluent limitations were developed.

A. TECHNOLOGY-BASED VERSUS WATER QUALITY STANDARDS-BASED EFFLUENT LIMITATIONS AND CONDITIONS

Following regulations promulgated at LAC 33:IX.2707.L.2.b/40 CFR Part 122.44(l)(2)(ii), the draft permit limits are based on either technology-based effluent limits pursuant to LAC 33:IX.2707.A/40 CFR Part 122.44(a) or on State water quality standards and requirements pursuant to LAC 33:IX.2707.D/40 CFR Part 122.44(d), whichever are more stringent.

B. TECHNOLOGY-BASED EFFLUENT LIMITATIONS AND CONDITIONS

Regulations promulgated at LAC 33:IX.2707.A/40 CFR Part 122.44(a) require technology-based effluent limitations to be placed in LPDES permits based on effluent limitations guidelines where applicable, on BPJ (best professional judgement) in the absence of guidelines, or on a combination of the two. The following is a rationale for types of wastewaters. See outfall information descriptions for associated outfall(s) in Section VII.

Process Wastewaters - Process wastewaters are discharged from the wastewater treatment plant (WWTP) at Internal Outfall 101 and discharged to Outfall 001 via the plant moat system. Internal Outfall 101 also handles wastewaters from Internal Outfalls 201, 301 (optional), and 401 (optional).

1. Outfall 001 - the discharge from the plant stormwater drainage system to the Mississippi River. The plant stormwater drainage system receives treated discharge from Internal Outfall 101 and optional treated discharge from Outfall 401; non-contact cooling water and cooling tower and boiler blowdown; treated sanitary wastewater from the administration building; wastewaters from the Aniline Plant Neutralization System, the HCL Neutralization Facility, Utilities Neutralization System, the Chlorine-Caustic Unloading (CCU) Plant, DEMIN sumps, multimedia filter, and COGEN Plant; acid scrubber blowdown; Marine Shipping Tank Farm low contamination potential stormwater and wash down water; steam condensate from steam traps, IMTT dock area secondary containment effluent; IMTT low contamination potential stormwater; BASF DNT Plant low contamination potential stormwater; Air Liquide low contamination potential stormwater and wash down water; sand filter backwash; low contamination potential stormwater runoff and wash down water; and hydrostatic test waters.

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<u>PARAMETER</u>	<u>MONTHLY AVERAGE</u> (lbs/day)	<u>DAILY MAXIMUM</u> (lbs/day)
Flow (MGD)	Report	Report (continuous monitoring)
pH (s.u)	6.0	9.0 (continuous monitoring)

Site-Specific Consideration(s)

Flow - established in accordance with LAC 33:IX.2707.I.1.b.

pH - established in accordance with LAC 33:IX.1113.C.1.

***Internal Outfall 101** - the discharge from the Wastewater Treatment Plant (WWTP) and the optional discharge from the TDI Plant carbon treatment unit to Final Outfall 001 via the plant moat system. The WWTP receives discharges from Internal Outfall 201 and 301; process wastewaters from the Polyols Plant, TDI Plant, MDI Plant, Amines Plant, THF/PTHF Plant, EO/EG Plant, Glyoxal Plant, PYR/NVP/PVP Plant, Acetylene Plant, APCI SSU Plant, BASF DNT Plant, Surfactants Plant, Basic Chemicals EDC Plant, and IMTT Facility; filtrate and wash down water from the sludge belt press; sanitary wastewater; wastewater from groundwater recovery projects; acid addition; all stormwater collected in the WWTP; WWTP water usage, which includes vapor scrubber and plant seal wastewater, etc.; hydrostatic test waters; maintenance activity wastewaters; line pacification rinse water; and high contamination potential (i.e., the first flush, defined as 1.0 inch per 24-hour period) process area stormwater runoff. In addition, the WWTP may receive optional discharges from Internal Outfall 401; the Aniline Plant Neutralization System; the HCL Neutralization Facility; the CCU Plant; and IMTT dock area secondary containment.

BASF Corporation, Geismar Louisiana Production Site is subject to Best Practicable Control Technology Currently Available (BPT) and Best Available Technology Economically Achievable (BAT) effluent limitation guidelines listed below:

<u>Manufacturing Operation</u>	<u>Guideline</u>
Organic chemical manufacturing	40 CFR 414, Subpart(s) F, G, H and I.

Calculations and basis of permit limitations are found at Appendix A and associated appendices. See below for site-specific considerations.

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<u>PARAMETER</u>	<u>MONTHLY AVERAGE (lbs/day)</u>	<u>DAILY MAXIMUM (lbs/day)</u>
Flow (MGD)	Report	Report (continuous monitoring)
BOD ₅	1623	4352
TSS	2300	7417
Total Cyanide	262.13	436.25
Acrylonitrile	4.41	11.11
Benzene	1.70	6.25
Carbon Tetrachloride	0.83	1.75
Chlorobenzene	0.69	1.29
Chloroethane	4.78	12.31
Chloroform	0.96	2.11
1,1-Dichloroethane	1.01	2.71
1,2-Dichloroethane	3.12	9.69
1,1-Dichloroethylene	0.73	1.15
1,2-trans-Dichloroethylene	0.96	2.48
1,2-Dichloropropane	7.03	10.56
1,3-Dichloropropylene	1.33	2.02
Ethylbenzene	1.47	4.96
Methyl Chloride	3.95	8.73
Methylene Chloride	1.84	4.09
Tetrachloroethylene	1.01	2.57
Toluene	1.19	3.67
1,1,1-Trichloroethane	0.96	2.48
1,1,2-Trichloroethane	0.96	2.48
Trichloroethylene	0.96	2.48
Vinyl Chloride	4.78	12.31
2-Chlorophenol	1.42	4.50
2,4-Dichlorophenol	1.79	5.14

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PARAMETER	MONTHLY AVERAGE (lbs/day)	DAILY MAXIMUM (lbs/day)
2,4-Dimethylphenol	0.83	1.65
4,6-Dinitro-o-cresol	3.58	12.72
2,4-Dinitrophenol	3.26	5.65
2-Nitrophenol	1.88	3.17
4-Nitrophenol	3.31	5.70
Phenol	0.69	1.19
Acenaphthene	1.01	2.71
Acenaphthylene	1.01	2.71
Anthracene	1.01	2.71
Benzo (a) anthracene	1.01	2.71
Benzo (a) pyrene	1.06	2.80
3,4-Benzofluoranthene	1.06	2.80
Benzo(k)fluoranthene	1.01	2.71
Bis(2-ethylhexyl)phthalate	4.73	12.81
Chrysene	1.01	2.71
1,2-Dichlorobenzene	3.54	7.49
1,3-Dichlorobenzene	1.42	2.02
1,4-Dichlorobenzene	0.69	1.29
Diethyl phthalate	3.72	9.32
Dimethyl phthalate	0.87	2.16
Di-n-butyl phthalate	1.24	2.62
2,4-Dinitrotoluene	5.19	13.09
2,6-Dinitrotoluene	11.71	29.44
Fluoranthene	1.15	3.12
Fluorene	1.01	2.71
Hexachlorobenzene**	0.49	1.18
Hexachlorobutadiene	0.92	2.25

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PARAMETER	MONTHLY AVERAGE (lbs/day)	DAILY MAXIMUM (lbs/day)
Hexachloroethane	0.96	2.48
Naphthalene	1.01	2.71
Nitrobenzene	1.24	3.12
Phenanthrene	1.01	2.71
Pyrene	1.15	3.08
1,2,4-Trichlorobenzene	3.12	6.43

**Guideline Parameter with water quality based limitations.

Site-Specific Consideration(s)

Flow - established in accordance with LAC 33:IX.2707.I.1.b.

BOD₅, TSS, Benzene, Carbon Tetrachloride, Chlorobenzene, Chloroethane, Chloroform, 1,1-Dichloroethane, 1,2-Dichloroethane, 1,1-Dichloroethylene, 1,2-trans-Dichloroethylene, 1,2-Dichloropropane, 1,3-Dichloropropylene, Ethylbenzene, Methyl Chloride, Methylene Chloride, Tetrachloroethylene, Toluene, 1,1,1-Trichloroethane, 1,1,2-Trichloroethane, Trichloroethylene, Vinyl Chloride, 2-Chlorophenol, 2,4-Dichlorophenol, 2,4-Dimethylphenol, 4,6-Dinitro-o-cresol, 2,4-Dinitrophenol, 2-Nitrophenol, 4-Nitrophenol, Phenol, Acenaphthene, Acenaphthylene, Anthracene, Benzo (a) anthracene, Benzo (a) pyrene, 3,4-Benzofluoranthene, Benzo(k)fluoranthene, Bis(2-ethylhexyl)phthalate, Chrysene, 1,2-Dichlorobenzene, 1,3-Dichlorobenzene, 1,4-Dichlorobenzene, Diethyl phthalate, Dimethyl phthalate, Di-n-butyl phthalate, 2,4-Dinitrotoluene, 2,6-Dinitrotoluene, Fluoranthene, Fluorene, Hexachlorobenzene, Hexachlorobutadiene, Hexachloroethane, Naphthalene, Nitrobenzene, Phenanthrene, Pyrene, and 1,2,4-Trichlorobenzene - Limitations established in accordance with the Organic Chemical Manufacturing Guidelines at 40 CFR Part 414.

Cyanide - As established in the LPDES permits effective 5/1/98 and 2/1/04, alternate BAT cyanide concentrations were established. 40 CFR 414.11(g) specifies that alternate total cyanide limitations may be established to take into account non-amenable cyanide. Non-amenable cyanide is defined as the amount of total cyanide that cannot be oxidized by alkaline chlorination treatment. The total cyanide concentrations were derived by adding the nonamenable cyanide concentration values to the promulgated cyanide concentration values (amenable). Non-amenable concentration values were provided in a the application (Page 5-1 through Page 5-15) dated 01/17/97 submitted by Lierman (BASF) to Levy (LDEQ).

Mo. Avg: 0.42 mg/L (amenable) + 41.1 mg/L (non-amenable) = 41.52 mg/L. (total)

Daily Max: 1.2 mg/L (amenable) + 67.9 (non-amenable) = 69.1 mg/L (total)

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***Internal Outfall 201** - the discharge from the Diols Plants: effluent from the metals precipitation treatment unit, the distillation unit wastewater, and the GBL/NMP unit wastewater to the WWTP. The metals precipitation treatment unit receives process wastewater and high contamination potential (i.e., the first flush, defined as 1.0 inch per 24-hour period) stormwater runoff from the process area sumps.

PARAMETER	MONTHLY AVERAGE (Mg/L)	DAILY MAXIMUM (Mg/L)
Flow (MGD)	Report	Report
Total Copper	1.45	3.38
Total Nickel	1.69	3.98

Site-Specific Consideration(s)

Flow - established in accordance with LAC 33:IX.2707.I.1.b.

Total Copper and Total Nickel - Permit limitations are based on 40 CFR 414.91 and are consistent with those established in the existing permit.

***Internal Outfall 301** - the discharge from the TDA unit metals treatment unit and the TDI Plant distillation unit (T120), on an as needed basis to the WWTP. The TDI distillation unit wastewater may be optionally diverted from the WWTP, routed to carbon treatments, combined with WWTP effluent, and discharged through Internal Outfall 101; or optionally be diverted from the WWTP, routed to carbon treatment, and discharged to the plant moat system (*1). (Discharge to the plant moat system will be separately and concurrently sampled during the same 24-hour period as Internal Outfall 101. The separately collected 24-hour composite samples are combined proportional to flow and analyzed as one sample.) The TDA unit metals treatment unit receives high contamination potential (i.e., the first flush, defined as 1.0 inch per 24-hour period) stormwater runoff from the TDA unit, TDA unit wash down, and wastewater generated from maintenance activities.

PARAMETER	MONTHLY AVERAGE (Mg/L)	DAILY MAXIMUM (Mg/L)
Flow (MGD)	Report	Report
Total Nickel	1.69	3.98

Site-Specific Consideration(s)

Flow - established in accordance with LAC 33:IX.2707.I.1.b.

Total Nickel - Permit limitations are based on 40 CFR 414.91 and are consistent with those established in the existing permit.

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***Internal Outfall 401** - the discharge of treated process wastewaters from the Aniline Plant, incinerator scrubber blowdown, high contamination potential (i.e., the first flush, defined as 1.0 inch per 24-hour period) stormwater and untreated low contamination potential stormwater runoff from the Aniline Plant.

<u>PARAMETER</u>	<u>MONTHLY AVERAGE (LBS/DAY)</u>	<u>DAILY MAXIMUM (LBS/DAY)</u>
Flow (MGD)	Report	Report (continuous monitoring)
Total Copper	3.85	8.96

Site-Specific Consideration(s)

Flow - established in accordance with LAC 33:IX.2707.I.1.b.

Total Copper - Permit limitations are based on 40 CFR 414.91 and are consistent with those established in the existing permit. The following calculation was used to determine the limitations:

OCPSF Guideline Value in mg/L x Flow in MGD x 8.34 lbs/gal = Limitation

1.45 mg/L Average x 0.318 MGD x 8.34 lbs/gal = 3.85 lbs/day Monthly Average

3.38 mg/L Average x 0.318 MGD x 8.34 lbs/gal = 8.96 lbs/day Daily Maximum

2. Outfall 002 - Utility Wastewaters

***Outfall 002** - the discharge of the raw water intake treatment system clarifier underflow.

<u>PARAMETER</u>	<u>MONTHLY AVERAGE</u>	<u>DAILY MAXIMUM</u>
Flow (MGD)	Report	Report
Clarifying Agents	Inventory Calculation	

Site-Specific Consideration(s)

Flow - established in accordance with LAC 33:IX.2707.I.1.b.

Clarifying Agents (inventory calculation) - the reporting requirement was retained from the current LPDES permit, effective on February 1, 2004.

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3. Outfall(s) 003 - Stormwater

***Outfall 003** - the intermittent discharge of potential emergency overflow of excess capacity stormwater (commingled with other streams discharging to the plant moat system) from the stormwater retention basin.

<u>PARAMETER</u>	<u>MONTHLY AVERAGE</u> (Mg/L)	<u>DAILY MAXIMUM</u> (Mg/L)
Flow (MGD)	Report	Report
TOC	---	45
Oil & Grease	--	15
pH (s.u.)	6.0	9.0

Site-Specific Consideration(s)

Flow - established in accordance with LAC 33:IX.2707.I.1.b.

TOC, Oil & Grease, and pH - BPJ limitations established in accordance with this Office's guidance on stormwater, noted in a letter dated 6/17/87, from J. Dale Givens (LDEQ) to Myron Knudson (EPA Region 6). These limitations were retained from the current LPDES permit, effective on 2/1/04.

In accordance with LAC 33:IX.2707.I.3 and [40 CFR 122.44(I)(3) and (4)], a Part II condition is proposed for applicability to all storm water discharges from the facility, either through permitted outfalls or through outfalls which are not listed in the permit or as sheet flow. The Part II condition requires a Storm Water Pollution Prevention Plan (SWP3) within six (6) months of the effective date of the final permit, along with other requirements. If the permittee maintains other plans that contain duplicative information, those plans could be incorporated by reference to the SWP3. Examples of these type plans include, but are not limited to: Spill Prevention Control and Countermeasures Plan (SPCC), Best Management Plan (BMP), Response Plans, etc. The conditions will be found in the draft permit. Including Best Management Practice (BMP) controls in the form of a SWP3 is consistent with other LPDES and EPA permits regulating similar discharges of stormwater associated with industrial activity, as defined in LAC 33:IX.2522.B.14 [40 CFR 122.26(b)(14)].

C. **WATER QUALITY-BASED EFFLUENT LIMITATIONS**

Technology-based effluent limitations and/or specific analytical results from the permittee's application were screened against state water quality numerical standard based limits by following guidance procedures established in the Permitting Guidance Document for Implementing Louisiana Surface Water Quality Standards, LDEQ, September 27, 2001. Calculations, results, and documentation are given in Appendix B.

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In accordance with LAC 33:IX.2707.D.1/40 CFR § 122.44(d)(1), the existing (or potential) discharge (s) was evaluated in accordance with the Permitting Guidance Document for Implementing Louisiana Surface Water Quality Standards, LDEQ, September 27, 2001, to determine whether pollutants would be discharged "at a level which will cause, have the reasonable potential to cause, or contribute to an excursion above any state water quality standard." Calculations, results, and documentation are given in Appendix B.

The following pollutants received water quality based effluent limits:

PARAMETER(S)
Hexachlorobenzene

Minimum quantification levels (MQL's) for state water quality numerical standards-based effluent limitations are set at the values listed in the Permitting Guidance Document for Implementing Louisiana Surface Water Quality Standards, LDEQ, September 27, 2001. They are also listed in Part II of the permit.

TMDL Waterbodies

Outfalls 001 and 002

The discharges from outfalls 001 and 002 including treated process wastewater, non-contact cooling water, cooling tower blowdown, clarifier underflow, sanitary wastewater, and stormwater runoff are to Mississippi River, Segment No. 070301. The Mississippi River is not listed on the 303(d) report for any impairments. Therefore, no additional requirements have been established for these outfalls.

Outfall 003

The discharges from outfall 003 includes the emergency overflow of excess capacity stormwater to New River via Smith Bayou, Segment No. 040404. New River is listed on the 303(d) as impaired for organic enrichment/low DO, pathogen indicators, and noxious aquatic plants. A TMDL is scheduled to be completed by March 31, 2011.

Organic Enrichment/Low DO

To assess potential receiving water impairments of organic enrichment/low DO in the stormwater discharge from this outfall, the oxygen demanding parameter, TOC, was reviewed. Outfall 003 has a daily maximum TOC limitation of 50 mg/L. This limitation was retained from the current permit and is consistent with LDEQ guidance for similar discharges.

Pathogen Indicators

Pathogen Indicator impairments are normally associated with the discharges of sanitary wastewater. Outfall 003 contains stormwater discharges, and is not reasonably expected to cause further pathogen indicator impairments in this waterbody. Therefore, no additional requirements were placed in the proposed permit.

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Monitoring frequencies for water quality based limited parameters are established in accordance with the Permitting Guidance Document for Implementing Louisiana Surface Water Quality Standards, LDEQ, September 27, 2001.

Site-Specific Consideration(s)

None

D. Biomonitoring Requirements

It has been determined that there may be pollutants present in the effluent which may have the potential to cause toxic conditions in the receiving stream. The State of Louisiana has established a narrative criteria which states, "toxic substances shall not be present in quantities that alone or in combination will be toxic to plant or animal life." The Office of Environmental Services requires the use of the most recent EPA biomonitoring protocols.

Whole effluent biomonitoring is the most direct measure of potential toxicity which incorporates both the effects of synergism of effluent components and receiving stream water quality characteristics. Biomonitoring of the effluent is, therefore, required as a condition of this permit to assess potential toxicity. The biomonitoring procedures stipulated as a condition of this permit for Outfall(s) 001 are as follows:

<u>TOXICITY TESTS</u>	<u>FREQUENCY</u>
Acute static renewal 48-hour definitive toxicity test using <u>Daphnia pulex</u>	1/year
Acute static renewal 48-hour definitive toxicity test using fathead minnow (<u>Pimephales promelas</u>)	1/year

Toxicity tests shall be performed in accordance with protocols described in the latest revision of the "Methods for Measuring the Acute Toxicity of Effluents and Receiving Waters to Freshwater and Marine Organisms." The stipulated test species are appropriate to measure the toxicity of the effluent consistent with the requirements of the State water quality standards. The biomonitoring frequency has been established to reflect the likelihood of ambient toxicity and to provide data representative of the toxic potential of the facility's discharge in accordance with regulations promulgated at LAC 33:IX.2715/40 CFR Part 122.48.

Results of all dilutions as well as the associated chemical monitoring of pH, temperature, hardness, dissolved oxygen, conductivity, and alkalinity shall be documented in a full report according to the test method publication mentioned in the previous paragraph. The permittee shall submit a copy of the first full report to the Office of Environmental Compliance. The full report and subsequent reports are to be retained for three (3) years following the provisions of Part III.C.3 of this permit. The permit requires the submission of certain toxicity testing information as an attachment to the Discharge Monitoring Report.

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This permit may be reopened to require effluent limits, additional testing, and/or other appropriate actions to address toxicity if biomonitoring data show actual or potential ambient toxicity to be the result of the permittee's discharge to the receiving stream or water body. Modification or revocation of the permit is subject to the provisions of LAC 33:IX.3105/40 CFR 124.5. Accelerated or intensified toxicity testing may be required in accordance with Section 308 of the Clean Water Act.

Dilution Series

The permit requires five (5) dilutions in addition to the control (0% effluent) to be used in the toxicity tests. These additional effluent concentrations shall be 0.8%, 0.6%, 0.4%, 0.3%, and 0.2%. The low-flow effluent concentration (critical dilution) is defined as 0.6% effluent.

E. MONITORING FREQUENCIES

Regulations require permits to establish monitoring requirements to yield data representative of the monitored activity [LAC 33:IX.2715/40 CFR 122.48(b)] and to assure compliance with permit limitations [LAC 33:IX.2707.I./40 CFR 122.44(I)]. The following section(s) explain the rationale for the monitoring frequencies stated in the draft permit.

Process Wastewaters - Process wastewaters are discharged from the wastewater treatment plant (WWTP) at Internal Outfall 101 and discharged to Outfall 001 via the plant moat system. Internal Outfall 101 also handles wastewaters from Internal Outfalls 201, 301 (optional), and 401 (optional).

1. Outfall 001 - Process Wastewaters

***Outfall 001** - the discharge from the plant stormwater drainage system to the Mississippi River. The plant stormwater drainage system receives treated discharge from Internal Outfall 101 and optional treated discharge from Outfall 401; non-contact cooling water and cooling tower and boiler blowdown; treated sanitary wastewater from the administration building; wastewaters from the Aniline Plant Neutralization System, the HCL Neutralization Facility, Utilities Neutralization System, the Chlorine-Caustic Unloading (CCU) Plant, DEMIN sumps, multimedia filter, and COGEN Plant; acid scrubber blowdown; Marine Shipping Tank Farm low contamination potential stormwater and wash down water; steam condensate from steam traps, IMTT dock area secondary containment effluent; IMTT low contamination potential stormwater; BASF DNT Plant low contamination potential stormwater; Air Liquide low contamination potential stormwater and wash down water; sand filter backwash; low contamination potential stormwater runoff and wash down water; and hydrostatic test waters.

Flow and pH - Continuous monitoring has been retained from the current LPDES permit, effective February 1, 2004.

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PARAMETER	MONITORING FREQUENCY
Flow	Continuous
pH	Continuous(*)

(*) continuous recorder with pH excursion requirements.

***Internal Outfall 101** - the discharge from the Wastewater Treatment Plant (WWTP) and the optional discharge from the TDI Plant carbon treatment unit to Final Outfall 001 via the plant moat system. The WWTP receives discharges from Internal Outfall 201 and 301; process wastewaters from the Polyols Plant, TDI Plant, MDI Plant, Amines Plant, THF/PTHF Plant, EO/EG Plant, Glyoxal Plant, PYR/NVP/PVP Plant, Acetylene Plant, APCI SSU Plant, BASF DNT Plant, Surfactants Plant, Basic Chemicals EDC Plant, and IMTT Facility; filtrate and wash down water from the sludge belt press; sanitary wastewater; wastewater from groundwater recovery projects; acid addition; all stormwater collected in the WWTP; WWTP water usage, which includes vapor scrubber and plant seal wastewater, etc.; hydrostatic test waters; maintenance activity wastewaters; line pacification rinse water; and high contamination potential (i.e., the first flush, defined as 1.0 inch per 24-hour period) process area stormwater runoff. In addition, the WWTP may receive optional discharges from Internal Outfall 401; the Aniline Plant Neutralization System; the HCL Neutralization Facility; the CCU Plant; and IMTT dock area secondary containment.

Flow - Continuous monitoring has been retained from the current LPDES permit, effective February 1, 2004.

PARAMETER	MONITORING FREQUENCY
Flow	Continuous

BOD₅, TSS, and Nitrobenzene - A monitoring frequency of 1/week for the following listed toxic pollutants is considered adequate for the protection of the receiving water and its designated uses as stated in Section VI.7. These monitoring frequencies have been retained from the current LPDES permit, effective February 1, 2004.

PARAMETER	MONITORING FREQUENCY
BOD ₅	1/week
TSS	1/week
Nitrobenzene	1/week

Benzene, Chlorobenzene, and Toluene - A monitoring frequency of 1/2 weeks for the following listed toxic pollutants is considered adequate for the protection of the receiving water and its designated uses as stated in Section VI.7. The frequencies for Benzene, Chlorobenzene, and Toluene were reduced from 1/week to 1/2 weeks in accordance with the requirements stated in the USEPA Memorandum "Interim

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Guidance for Performance Based Reductions of NPDES Permit Monitoring Frequencies."

<u>PARAMETER</u>	<u>MONITORING FREQUENCY</u>
Benzene	1/ 2 weeks
Chlorobenzene	1/ 2 weeks
Toluene	1/ 2 weeks

Phenol - toxic pollutant being discharged well below the proposed draft permit limits are proposed to be monitored 1/month. This monitoring frequency has been retained from the current LPDES permit, effective February 1, 2004.

<u>PARAMETER</u>	<u>MONITORING FREQUENCY</u>
Phenol	1/month

Total Cyanide - A monitoring frequency of 1/quarter for the following listed toxic pollutant is considered adequate for the protection of the receiving water and its designated uses as stated in Section VI.7. The frequency has been reduced from 1/month to 1/quarter in accordance with the requirements stated in the USEPA Memorandum "Interim Guidance for Performance Based Reductions of NPDES Permit Monitoring Frequencies."

Hexachlorobenzene - Toxics with water quality based effluent limits listed in Section IX.C known to be in the discharge waters shall receive a monitoring frequency of 1/quarter. The monitoring frequency has been increased from 1/year to 1/quarter based on current practices for water quality limited parameters.

<u>PARAMETER</u>	<u>MONITORING FREQUENCY</u>
Total Cyanide	1/quarter
Hexachlorobenzene	1/quarter

Carbon Tetrachloride, Chloroethane, Chloroform, 1,1-Dichloroethane, 1,2-Dichloroethane, 1,1-Dichloroethylene, 1,2-trans-Dichloroethylene, 1,2-Dichloropropane, 1,3-Dichloropropylene, Ethylbenzene, Methyl Chloride, Methylene Chloride, Tetrachloroethylene, 1,1,1-Trichloroethane, 1,1,2-Trichloroethane, Trichloroethylene, Vinyl Chloride, 2-Chlorophenol, 2,4-Dichlorophenol, 2,4-Dimethylphenol, 4,6-Dinitro-o-cresol, 2,4-Dinitrophenol, 2-Nitrophenol, 4-Nitrophenol, Acenaphthene, Acenaphthylene, Anthracene, Benzo (a) anthracene, Benzo (a) pyrene, 3,4-Benzofluoranthene, Benzo(k)fluoranthene, Bis(2-ethylhexyl)phthalate, Chrysene, 1,2-Dichlorobenzene, 1,3-Dichlorobenzene, 1,4-Dichlorobenzene, Diethyl phthalate, Dimethyl phthalate, Di-n-butyl phthalate, 2,4-Dinitrotoluene, 2,6-Dinitrotoluene, Fluoranthene, Fluorene, Hexachlorobutadiene, Hexachloroethane, Naphthalene, Phenanthrene, Pyrene, and 1,2,4-Trichlorobenzene - Toxic pollutants not expected to be on-site are proposed to be monitored once per year. These

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monitoring frequencies have been retained from the current LPDES permit, effective February 1, 2004.

<u>PARAMETER</u>	<u>MONITORING FREQUENCY</u>
Acrylonitrile	1/year
Carbon Tetrachloride	1/year
Chloroethane	1/year
Chloroform	1/year
1,1-Dichloroethane	1/year
1,2-Dichloroethane	1/year
1,1-Dichloroethylene	1/year
1,2-trans-Dichloroethylene	1/year
1,2-Dichloropropane	1/year
1,3-Dichloropropylene	1/year
Ethylbenzene	1/year
Methyl Chloride	1/year
Methylene Chloride	1/year
Tetrachloroethylene	1/year
1,1,1-Trichloroethane	1/year
1,1,2-Trichloroethane	1/year
Trichloroethylene	1/year
Vinyl Chloride	1/year
2-Chlorophenol	1/year
2,4-Dichlorophenol	1/year
2,4-Dimethylphenol	1/year
4,6-Dinitro-o-cresol	1/year
2,4-Dinitrophenol	1/year
2-Nitrophenol	1/year
4-Nitrophenol	1/year
Acenaphthene	1/year

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PARAMETER	MONITORING FREQUENCY
Acenaphthylene	1/year
Anthracene	1/year
Benzo (a) anthracene	1/year
Benzo (a) pyrene	1/year
3,4-Benzofluoranthene	1/year
Benzo(k)fluoranthene	1/year
Bis(2-ethylhexyl)phthalate	1/year
Chrysene	1/year
1,2-Dichlorobenzene	1/year
1,3-Dichlorobenzene	1/year
1,4-Dichlorobenzene	1/year
Diethyl phthalate	1/year
Dimethyl phthalate	1/year
Di-n-butyl phthalate	1/year
2,4-Dinitrotoluene	1/year
2,6-Dinitrotoluene	1/year
Fluoranthene	1/year
Fluorene	1/year
Hexachlorobutadiene	1/year
Hexachloroethane	1/year
Naphthalene	1/year
Phenanthrene	1/year
Pyrene	1/year
1,2,4-Trichlorobenzene	1/year

Site Specific Consideration(s)

SECONDARY MONITORING PROCEDURES FOR FLOW MEASUREMENT AT INTERNAL OUTFALL 101

The permittee shall use the waste water treatment plant (WWTP) reactor influent flow monitoring data in lieu of the continuous flow recorder for flow measurement at Internal Outfall 101 during maintenance procedures or equipment modifications. This requirement was retained from the current LPDES permit, effective on February 1, 2004.

***Internal Outfall 201** - the discharge from the Diols Plants: effluent from the metals precipitation treatment unit, the distillation unit wastewater, and the GBL/NMP unit wastewater to the WWTP. The metals precipitation treatment unit receives process wastewater and high contamination potential (i.e., the first flush, defined as 1.0 inch per 24-hour period) stormwater runoff from the process area sumps.

Flow - Continuous monitoring has been retained from the current LPDES permit, effective February 1, 2004.

<u>PARAMETER</u>	<u>MONITORING FREQUENCY</u>
Flow	Continuous

Total Copper and Total Nickel - A monitoring frequency of 1/year for the following listed toxic pollutants is considered adequate for the protection of the receiving water and its designated uses as stated in Section VI.7. These monitoring frequencies have been retained from the current LPDES permit, effective February 1, 2004.

<u>PARAMETER</u>	<u>MONITORING FREQUENCY</u>
Total Copper	1/year
Total Nickel	1/year

***Internal Outfall 301** - the discharge from the TDA unit metals treatment unit and the TDI Plant distillation unit (T120), on an as needed basis to the WWTP. The TDI distillation unit wastewater may be optionally diverted from the WWTP, routed to carbon treatments, combined with WWTP effluent, and discharged through Internal Outfall 101; or optionally be diverted from the WWTP, routed to carbon treatment, and discharged to the plant moat system (*1). (Discharge to the plant moat system will be separately and concurrently sampled during the same 24-hour period as Internal Outfall 101. The separately collected 24-hour composite samples are combined proportional to flow and analyzed as one sample.) The TDA unit metals treatment unit receives high contamination potential (i.e., the first flush, defined as 1.0 inch per 24-hour period) stormwater runoff from the TDA unit, TDA unit wash down, and wastewater generated from maintenance activities.

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Flow - Continuous monitoring has been retained from the current LPDES permit, effective February 1, 2004.

PARAMETER	MONITORING FREQUENCY
Flow	Continuous

Total Nickel - A monitoring frequency of 1/2 weeks for the following listed toxic pollutant is considered adequate for the protection of the receiving water and its designated uses as stated in Section VI.7. The frequency for Total Nickel has been reduced from 1/week to 1/2 weeks in accordance with the requirements stated in the USEPA Memorandum "Interim Guidance for Performance Based Reductions of NPDES Permit Monitoring Frequencies."

PARAMETER	MONITORING FREQUENCY
Total Nickel	1/ 2 weeks

***Internal Outfall 401** - the discharge of treated process wastewaters from the Aniline Plant, incinerator scrubber blowdown, high contamination potential (i.e., the first flush, defined as 1.0 inch per 24-hour period) stormwater and untreated low contamination potential stormwater runoff from the Aniline Plant.

Flow - Continuous monitoring has been retained from the current LPDES permit, effective February 1, 2004.

PARAMETER	MONITORING FREQUENCY
Flow	Continuous

Total Copper - A monitoring frequency of 1/quarter for the following listed toxic pollutant is considered adequate for the protection of the receiving water and its designated uses as stated in Section VI.7. The frequency for Total Copper has been reduced from 2/month to 1/quarter in accordance with the requirements stated in the USEPA Memorandum "Interim Guidance for Performance Based Reductions of NPDES Permit Monitoring Frequencies."

PARAMETER	MONITORING FREQUENCY
Total Copper	1/quarter

2. Outfall 002 - Utility Wastewaters

***Outfall 002** - the discharge of the raw water intake treatment system clarifier underflow.

Flow - 1/week monitoring has been retained from the current LPDES permit, effective February 1, 2004.

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<u>PARAMETER</u>	<u>MONITORING FREQUENCY</u>
Flow	Continuous

Coagulants - monthly inventory calculation has been retained from the current LPDES permit, effective February 1, 2004.

<u>PARAMETER</u>	<u>MONITORING FREQUENCY</u>
Coagulants	Monthly Inventory Calculation

3. Outfall 003 - Stormwater

***Outfall 003** - the intermittent discharge of potential emergency overflow of excess capacity stormwater (commingled with other streams discharging to the plant moat system) from the stormwater retention basin.

Flow, TOC, Oil & Grease, and pH - 1/day monitoring has been retained from the current LPDES permit, effective February 1, 2004.

<u>PARAMETER</u>	<u>MONITORING FREQUENCY</u>
Flow	1/day
TOC	1/day
Oil & Grease	1/day
pH	1/day

X. Compliance History/DMR Review:

A compliance history/DMR review has been completed covering the period of October 1, 2004 through December 1, 2006.

Inspections

Facility inspection on May 25, 2005 found all areas satisfactory.

DMRs

The following excursions were reported by the facility:

<u>DATE</u>	<u>OUTFALL</u>	<u>PARAMETER</u>	<u>REPORTED VALUE</u>	<u>PERMITTED VALUE</u>
02/28/05	101	TSS	7550 lbs/day, daily max	5667 lbs/day, daily max
10/31/05	101	Nitrobenzene	4.83 lbs/day, daily max	2.42 lbs/day, daily max
05/31/06	101	TSS	2413 lbs/day, monthly avg	1760 lbs/day, monthly avg
06/30/06	101	BOD5	1268 lbs/day, monthly avg	1228 lbs/day, monthly avg

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DATE	OUTFALL	PARAMETER	REPORTED VALUE	PERMITTED VALUE
06/30/06	101	Toluene	1.03 lbs/day, monthly avg	0.92 lbs/day, monthly avg
06/30/06	101	Toluene	3.88 lbs/day, daily max	2.84 lbs/day, daily max

XI. "IT" Questions - Applicant's Responses

IT Questions and BASF Corporation's responses can be found in their LPDES permit application dated November 2006.

XII. Endangered Species:

Outfalls 001 and 002

The receiving waterbody, Subsegment 070301 of the Mississippi River Basin, has been identified by the U.S. Fish and Wildlife Service (FWS) as habitat for the Pallid Sturgeon, which are listed as an endangered species. This draft permit has been submitted to the FWS for review in accordance with a letter dated 9/29/06 from Watson (FWS) to Brown (LDEQ). As set forth in the Memorandum of Understanding between the LDEQ and the FWS, and after consultation with FWS, LDEQ has determined that the issuance of the LPDES permit is not likely to have an adverse effect upon the Pallid Sturgeon. Effluent limitations are established in the permit to ensure protection of aquatic life and maintenance of the receiving water as aquatic habitat. The more stringent of technology and water quality based limits (as applicable) have been applied to ensure maximum protection of the receiving water.

Outfall 003

The receiving waterbody, Subsegment 040404 of the Lake Pontchartrain Basin is not listed in Section II.2 of the Implementation Strategy as requiring consultation with the U.S. Fish and Wildlife Service (FWS). This strategy was submitted with a letter dated 9/29/06 from Watson (FWS) to Brown (LDEQ). Therefore, in accordance with the Memorandum of Understanding between the LDEQ and the FWS, no further informal (Section 7, Endangered Species Act) consultation is required. It was determined that the issuance of the LPDES permit is not likely to have an adverse effect on any endangered or candidate species or the critical habitat. The effluent limitations established in the permit ensure protection of aquatic life and maintenance of the receiving water as aquatic habitat.

XIII. Historic Sites:

The discharge is from an existing facility location, which does not include an expansion on undisturbed soils. Therefore, there should be no potential effect to sites or properties on or eligible for listing on the National Register of Historic Places, and in accordance with the "Memorandum of Understanding for the Protection of Historic Properties in Louisiana Regarding LPDES Permits" no consultation with the Louisiana State Historic Preservation Officer is required.

XIV. Tentative Determination:

On the basis of preliminary staff review, the Department of Environmental Quality has made a tentative determination to permit for the discharge described in the application.

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XV. Variances:

No requests for variances have been received by this Office.

XVI. Public Notices:

Upon publication of the public notice, a public comment period shall begin on the date of publication and last for at least 30 days thereafter. During this period, any interested persons may submit written comments on the draft permit and may request a public hearing to clarify issues involved in the permit decision at this Office's address on the first page of the fact sheet. A request for a public hearing shall be in writing and shall state the nature of the issues proposed to be raised in the hearing.

Public notice published in:

Local newspaper of general circulation

Office of Environmental Services Public Notice Mailing List